

LIST OF CURRENT CLAIMS

1. (Currently Amended) Architecture for the centralised control of events occurring in correspondence with remote peripheral electronic devices, comprising:

- at least one electronic central device (111), said electronic central device being provided with including a processing unit or CPU (123), a transmitting unit (115), a receiving unit (117) and a power supply unit (114);
- at least a device (121) for generating a network timing signal;
- at least one electronic peripheral device (11a, 11b, ...11n), said peripheral device being provided with a processing unit or CPU (23), a storage unit (25), a transmitting unit (15), a receiving unit (17), a device (21) for generating a local timing signal, a battery (13) and means for periodically interrupting and activating the electronic power supply to this transmitting and/or receiving unit,

~~characterised in that~~ wherein said at least one peripheral device (11a, 11b, ...11n) is programmable can be programmed by means of a flow of data autonomously output coming from said central device and received by said at least one peripheral device.

2. (Currently Amended) Architecture according to claim 1, wherein means are provided for allowing enabling the autonomous transfer to said peripheral device from said central device (111) of a flow of information which ~~can be~~ is received by said receiving unit (17) in said peripheral device (11a, 11b,...11n), said means for enabling the autonomous transfer of a flow of information including a synchronisation loop of the turn-on and turn-off slots of the transmitting/receiving units (15, 17) of said peripheral device with respect to the network timing signal and a data transfer loop from said central device (111) to said peripheral device (11a, 11b,...11n).

3. (Original) Architecture according to claim 2, wherein said central device (111) and/or said peripheral device (11a, 11b,...11n) can assume the following machine states:

- “sleeping state”, wherein the transmitting and receiving units are not supplied;
- “passive state”, wherein the receiving unit is supplied and the transmitting unit is not supplied;
- “active state”, wherein both the transmitting and receiving units are supplied.

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4. (Original) Architecture according to claim 3, wherein said central device (111) and/or said peripheral device (11a, 11b,...11n) periodically switches from the "sleeping state" to the "passive state", the frequency of said switching being determined by a local timing signal and the time length of said "passive state" being determined by said local timing signal and by the reception of data flows by the receiving unit (17).
5. (Original) Architecture according to claim 4, wherein said central device and/or said peripheral device periodically switches from the "passive state" to the "active state" and vice versa, the frequency of said switching being determined by the occurrence of an event occurring in correspondence with said central and/or peripheral device and requiring to be transmitted.
6. (Currently Amended) Architecture according to claim 1 ~~any of the preceding claims~~, wherein said peripheral device is a wireless device and wherein said transmitting unit and said receiving unit are a transmitting radio unit and a receiving radio unit, respectively.
7. (Currently Amended) Architecture according to claim 1 ~~any of the preceding claims~~, wherein said supply unit of said central device and/or of said peripheral device includes a battery.
8. (Original) Architecture according to claim 3, wherein said supply unit of said central device includes a power supply connected to a public or private electric power supply network.
9. (Currently Amended) Architecture according to claim 1 ~~any of the preceding claims~~, wherein said device for generating a network timing signal is integrated in said central device.
10. (Currently Amended) Architecture according to claim 1 ~~any of the preceding claims~~, wherein said peripheral device is a sensor of an anti-theft or anti-fire system and wherein said central device is the control unit of said system.

11. (Currently Amended) Architecture according to claim 6, wherein said receiving and transmitting radio units are caused to communicate to each other at varying frequencies belonging to a group of predetermined frequencies chosen according to a sequence which is predetermined and common to all devices, and wherein said synchronisation loop is carried out by utilising always the same recovery frequency (rf) from this group of frequencies.

12. (Currently Amended) Method for the centralised control, by means of at least one electronic central device provided with a processing unit or CPU (123), a transmitting unit (115), a receiving unit (117), a supply unit (114) and by means of a device (121) for generating a network timing signal, of events occurring in correspondence with remote peripheral electronic devices provided with a processing unit or CPU (23), a storage unit (25), a transmitting unit (15), a receiving unit (17), a device (21) for generating a local timing signal, a battery (13) and means for periodically interrupting and activating the electronic power supply to this transmitting and/or receiving unit, ~~characterised by that it comprises a phase wherein comprising programming during a phase~~ said at least one peripheral device (11a, 11b,...11n) ~~is programmed~~ by means of a flow of data autonomously coming output from said central device and received by said peripheral device.

13. (Currently Amended) Method according to claim 12, wherein said peripheral device is programmed by means of a first phase of synchronisation of the turn-on and turn-off slots of the radio units of said peripheral device with the network timing signal and a second phase during which the data are transferred from said central device to said peripheral device.

14. (Currently Amended) Method according to claim 13, wherein said synchronisation phase ~~involves the~~ comprises sending, by the peripheral device which is out of synchrony, of a synchronisation request (REQ_SYNC), said request being repeated till the reception, by said peripheral device, of an answer (SYNC) emitted by the network timing device.

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15. (Currently Amended) Method according to claim 13, wherein said synchronisation phase ~~involves the~~ comprises sending, by the peripheral device which is out of synchrony, of a synchronisation request (REQ_SYNC), said request being always repeated at the same recovery frequency (rf), chosen from a group of frequencies (f_1, f_2, \dots, f_n) at which said peripheral devices and said central device operate for the data transmission and reception.

16. (Currently Amended) Method according to claim 14 ~~or 15~~, wherein said central device (111) and/or said peripheral device (11a, 11b, ..., 11n) can assume the following machine states:

- “sleeping state”, wherein the transmitting and receiving units are not supplied;
- “passive state”, wherein the receiving unit is supplied and the transmitting unit is not supplied;
- “active state”, wherein both the transmitting and receiving units are supplied.

17. (Currently Amended) Method according to claim 16, wherein said data flow (DATA) for the programming of said peripheral device is transmitted by said central device when said peripheral device is in “passive state”, said peripheral device moving to “active state” at the end of the reception of said data flow, thereby enabling transmittal of ~~in order to transmit~~ a confirmation string (ACK) to said central device.

18. (Currently Amended) Method according to claim 12 ~~any of claims 12 to 16~~, wherein the transmission protocol from the peripheral devices to the central device and vice versa is of the CSMA (Carrier Sense Multiple Access) type and includes at least a “Header” field, containing the information about the structure of the string itself, a field containing the source and destination addresses, a field containing the string length, a field containing the data and a control field (CRC).

19. (Original) Method according to claim 18, wherein said transmission protocol further includes at least an auxiliary control field, a variant field and an auto-correction field.

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20. (Original) Method according to claim 19, wherein said auto-correction field is coded according to the Reed-Solomon code.

21. (Currently Amended) Method according to claim 18 ~~any of claims 18 to 20~~, wherein at least one of said fields is ciphered by means of a symmetric algorithm, ~~for example FEALnX algorithm (64 bit block cipher), used in CBC (Cipher Block Chaining) mode, and/or with public key.~~